Serial No.: 09/752,623 Attorney Docket No.: 00P09130 US

REMARKS

Upon entry of the instant Amendment, Claims 1-17 are pending. Claims 1, 3, 4, 6, and 8 have been amended to more particularly point out Applicants' invention. Claim 2 has been canceled.

Claims 1, 3-4, 6, and 8 have been rejected under 35 U.S.C. §102(b) as being anticipated by Smith et al., U.S. Patent No. 5,790,587 ("Smith"). In order for there to be anticipation, each and every element of the claimed invention must be present in a single prior reference. Applicants respectfully submit that the claimed invention is not taught, suggested, or implied by Smith.

As discussed in the Specification, in many cordless and/or wireless systems, the available bandwidth is subdivided into smaller channels. However, the band-pass filter typically has a bandwidth covering the entire available bandwidth. When the signal bandwidth is less than the available system bandwidth, the band-pass filter 102 fails to filter out the "out of channel" interferers. These are then mixed and can negatively impact system robustness, which results in a higher bit error rate and voice quality degradation.

Accordingly, an embodiment of the present invention provides a programmable band-pass filter in a radio-frequency receiver. The band-pass filter has a bandwidth sized to substantially cover only a channel bandwidth. Once the appropriate channel in use is determined, the frequency band of the band-pass filter is set to correspond to it. In certain embodiments of the present invention, the frequency band is divided into subsets, each subset having a plurality of channels. The bandwidth of the filter is selected to correspond to one of the channels.

Thus, claim 1 has been amended to recite "a programmable filter adapted to bandpass filter said signals at individual ones of said channels, said receiver being a frequency hopping receiver and said programmable filter receiving a frequency select signal, said programmable filter adapted to select a channel for filtering responsive to

said frequency select signal, said bandpass filter having a bandwidth sized to correspond to a channel bandwidth; wherein said frequency bands are divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected;" claim 3 has been amended to recite "said receiver being a frequency hopping receiver and said bandpass filter receiving a frequency select signal, said bandpass filter adapted to select a channel for filtering responsive to said frequency select signal, said bandpass filter having a bandwidth sized to correspond to a channel bandwidth; wherein said frequency channels are selected from a plurality of frequency bands divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected;" claim 4 has been amended to recite "wherein each of said base station and handsets has a radio-frequency receiver adapted to receive signals at a plurality of channels within frequency bands and a programmable filter adapted to bandpass filter said signals at individual ones of said channels, said filter having a bandwidth sized to correspond to a channel bandwidth, wherein said frequency bands are divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected;" claim 6 has been amended to recite "band-pass filtering said channel at an input to a radio-frequency receiver, said bandpass filtering comprising filtering with a bandwidth sized to correspond to a channel bandwidth; wherein said frequency channels are selected from a plurality of frequency bands divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected;" and claim 8 has been amended to recite "providing a bandpass filter having a variable band corresponding to said one of said plurality of frequency channels, said bandpass filter having a bandwidth sized to correspond to a channel bandwidth; wherein said frequency channels are selected from a plurality of frequency bands divided into a plurality of subsets, each subset having a plurality of channels, and said frequency

select signal indicates which channel in a particular subset is selected."

In contrast, Smith relates merely to a system operable in a narrowband and a spread spectrum mode and provides for bandpass filtering in the appropriate mode. Further, Smith does not appear to provide a frequency-hopping receiver, as recited in claims 1 and 3; nor does Smith appear to provide a programmable bandpass filter having a bandwidth sized to the channel bandwidth, selected to correspond to one of the channels chosen from a subset of frequencies in a frequency band of a frequency-hopping system, as generally recited in the claims at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims.

Claims 2, 5, 7, and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Ciccone, U.S. Patent No. 6,128,504 ("Ciccone"). Applicants respectfully submit that the claimed invention is not taught, suggested, or implied by Smith or Ciccone, either singly or in combination. Ciccone is relied on for allegedly teaching a frequency hopping receiver. However, like Smith, Ciccone does not appear to relate to a programmable bandpass filter having a bandwidth sized to the channel bandwidth, selected to correspond to one of the channels chosen from a subset of frequencies in a frequency band of a frequency-hopping system, as generally recited in the claims at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims.

Claims 10-17 were rejected under 35 U.S.C 103(a) as being unpatentable over Ciccone in view of Smith. Applicants respectfully submit that the claimed invention is not taught, suggested, or implied by Ciccone or Smith, either singly or in combination. Claim 10 has been amended to recite "said band pass filter filtering channels at frequencies of said frequency hopping scheme responsive to said information, wherein a bandwidth of said band pass filter is sized to correspond to a channel bandwidth; wherein said frequency channels are selected from a plurality of frequency bands divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected;" claim

14 has been amended to recite "wherein said band pass filter is adapted to filter channels at frequencies of said frequency hopping scheme responsive to said information, wherein a bandwidth of said band pass filter is sized to correspond to a channel bandwidth; wherein said frequency channels are selected from a plurality of frequency bands divided into a plurality of subsets, each subset having a plurality of channels, and said frequency select signal indicates which channel in a particular subset is selected." As discussed above, neither Smith nor, Ciccone appear to relate to a programmable bandpass filter having a bandwidth sized to the channel bandwidth selected to correspond to one of the channels chosen from a subset of frequencies in a frequency band of a frequency-hopping system, as generally recited in the claims at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims.

Serial No.: 09/752,623 Attorney Docket No.: 00P09130 US

For all of the above reasons, Applicants respectfully submit that the application is in condition for allowance, which allowance is earnestly solicited.

Date: Jan. 12, 2004

Respectfully requested,

SIEMENS CORPORATION
Intellectual Property Department
170 Wood Avenue South
Iselin, New Jersey 08830
ATTENTION: Elsa Keller, IP Department
Telephone: (732) 321-3026

By: Thomas George

Thomas George
Registration No. 45,740
Attorney for Applicants
Tel: 650-694-5191
Fax: 650-968-4517